

REMARKS

The Office Action mailed February 3, 2006 has been reviewed and carefully considered. Claims 1, 4, 7 and 10 have been amended and claims 2-3 and 8-9 have been canceled. Claims 1, 4-7 and 10-12 are pending. Reconsideration of the claims in view of the remarks provided herein below and withdrawal of the present rejections are respectfully requested.

In paragraph 2 on page 2 of the Office Action, claims 1-5 and 7-11 were rejected under § 102(e) as being anticipated by Mao. In paragraph 4 on page 3 of the Office Action, claims 6 and 12 were rejected under § 103(a) as being unpatentable over Mao.

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has amended claims 1, 4, 7 and 10 to include the limitations of claims 2-3 and 8-9 respectively. Applicant respectfully submits that Mao fails to disclose, teach or disclose the present invention as recited in the amended claims.

Mao discloses a spin valve head wherein the free layer and a pinned layer, wherein the pinned layer is wider than the free layer. However, none of the embodiments disclosed by Mao include suggest a first pinned layer having a first width, a free layer having a second width, a bias layer having the second width wherein the second width is smaller than the first width, a second pinned layer having a third magnetic orientation anti-parallel to the first magnetic orientation and a coupling layer disposed between the first and second pinned layers, wherein a thickness of the first pinned layer is substantially equal to a thickness of the second pinned layer.

For example, in Fig. 5A of Mao one pinned layer has the same width as the free layer whereas the other pinned layer is wider. In Fig. 5B, one pinned layer has the same width as the free layer whereas the other pinned layer is wider and the bias layer is wider than the free layer. In Fig. 6A and 6B, both pinned layers have the same width as the free layer. In Fig. 6B, the bias layer is wider than the free layer.

Accordingly, Mao fails to disclose, teach or suggest a second pinned layer having a third magnetic orientation anti-parallel to the first magnetic orientation and a coupling layer disposed between the first and second pinned layers, wherein a thickness of the first pinned layer is substantially equal to a thickness of the second pinned layer.

Appl. No. 10/626,930
HSJ920030076US2(HITG.049-0548)
Amdt. Dated May 3, 2006
Reply to Office Action of February 3, 2006

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 423-757-0264.

Respectfully submitted,

Chambliss, Bahner and Stophel
1000 Tallan Building
Two Union Square
Chattanooga, TN 37402
423-757-0264

By: 
Name: David W. Lynch
Reg. No.: 36,204